



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/998,050	11/29/2001	Andre Weimerskirch	US010422	5481
24737	7590	10/04/2004	EXAMINER	
PHILIPS INTELLECTUAL PROPERTY & STANDARDS P.O. BOX 3001 BRIARCLIFF MANOR, NY 10510			DO, CHAT C	
			ART UNIT	PAPER NUMBER
			2124	

DATE MAILED: 10/04/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/998,050

Applicant(s)

WEIMERSKIRCH, ANDRE

Examiner

Chat C. Do

Art Unit

2124

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11/29/01; 01/31/02; 01/15/04.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 and 10-21 is/are rejected.
- 7) ☒ Claim(s) 9 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 November 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 01/15/2004.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____.

DETAILED ACTION***Drawings***

1. Figures 1-4 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated, in particular they illustrate the invention of patents Application No. 09/519,549 and 09/912,685. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.121(d)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the limitations cited in all independent claims and claim 9 must be shown or the feature(s) canceled from the claim(s). In these claims, they disclose multiples (at least two) flip-flops that operate together, however, Figures 5-8 have only one flip-flop as input signal generator flip-flop. No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure

Art Unit: 2124

is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency.

Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

3. The disclosure is objected to because of the following informalities: the applicant is advised to update information cited in the "cross-reference to related applications" section of the present application.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the

Art Unit: 2124

international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1-8 and 10-21 are rejected under 35 U.S.C. 102(e) as being anticipated by Epstein (U.S. 6,631,390).

Re claim 1, Epstein discloses in Figures 2A-2C as a first embodiment a method for generating a random number (abstract), comprising the steps operating a plurality of flip-flops a meta-stable state (e.g. primarily flip-flop 210 and then 240-242, col. 4 lines 8-16 and lines 48-55); generating a random bit if one of flip-flops enter meta-stable state (col. 3 lines 1-5); and preventing the generation of a random more than of plurality of flip-flops enter meta-stable state within a predefined time interval (col. 4 lines 32-37 wherein if flip-flop 210 is not in meta-stage, than no mistake is generated and no random number is generated from circuit 260).

Re claim 2, Epstein further discloses in Figures 2A-2C as a first embodiment the flip-flops are driven in parallel (Figures 2B 240-242).

Re claim 3, Epstein further discloses in Figures 2A-2C as a first embodiment at lease one of flip-flop is connected to least one other of flip-flops (Figure 2B wherein 210 is connected to 240-242).

Re claim 4, Epstein further discloses in Figures 2A-2C as a first embodiment the preventing step is performed by one or more exclusive or (XOR) circuits (250).

Re claim 5, Epstein further discloses in Figures 2A-2C as a first embodiment the generating step further comprises the step of choosing a random

Art Unit: 2124

bit an output of one of flip-flops does not match an applied input (output of 250 as mistake signal).

Re claim 6, Epstein further discloses in Figures 2A-2C as a first embodiment the step of synchronizing an output of each of flip-flops (all flip-flop is driven with 230) with local clock source (230).

Re claim 7, Epstein further discloses in Figures 2A-2C as a first embodiment a synchronizing circuit that performs synchronizing step is less susceptible becoming meta-stable than flip-flops (col. 4 lines 50-60).

Re claim 8, Epstein further discloses in Figures 2A-2C as a first embodiment the step of a plurality of random bits to produce a random collecting number (260).

Re claim 10, it is a means claim of claim 1. Thus, claim 10 is also rejected under the same rationale as cited in the rejection of rejected claim 1.

Re claim 11, it is a means claim of claim 2. Thus, claim 11 is also rejected under the same rationale as cited in the rejection of rejected claim 2.

Re claim 12, it is a means claim of claim 3. Thus, claim 12 is also rejected under the same rationale as cited in the rejection of rejected claim 3.

Re claim 13, it is a means claim of claim 4. Thus, claim 13 is also rejected under the same rationale as cited in the rejection of rejected claim 4.

Re claim 14, it is a means claim of claim 5. Thus, claim 14 is also rejected under the same rationale as cited in the rejection of rejected claim 5.

Re claim 15, it is a means claim of claim 6. Thus, claim 15 is also rejected under the same rationale as cited in the rejection of rejected claim 6.

Art Unit: 2124

Re claim 16, it is a means claim of claim 7. Thus, claim 16 is also rejected under the same rationale as cited in the rejection of rejected claim 7.

Re claim 17, it is a means claim of claim 8. Thus, claim 17 is also rejected under the same rationale as cited in the rejection of rejected claim 8.

Re claim 18, Epstein discloses in Figures 2A-2C as a first embodiment a method for generating a random number (abstract), comprising the steps operating a first flip-flop in a meta-stable state (210); and generating a random bit from an output of a second flip flop when first flip-flop is meta-stable state (242).

Re claim 19, it is has limitations cited in claim 4. Thus, claim 19 is also rejected under the same rationale as cited in the rejection of rejected claim 4.

Re claim 20, it is has limitations cited in claim 6. Thus, claim 20 is also rejected under the same rationale as cited in the rejection of rejected claim 6.

Re claim 21, it is has limitations cited in claim 8. Thus, claim 21 is also rejected under the same rationale as cited in the rejection of rejected claim 8.

Allowable Subject Matter

6. Claim 9 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Art Unit: 2124

- a. U.S. Patent No. 6,480,072 to Walsh et al. disclose a method and apparatus for generating random numbers.
- b. U.S. Patent Application No. 09/912,685 to Epstein disclose a method and apparatus for generating a random number using the meta-stable behavior of latches.
- c. U.S. Patent Application No. 10/176,210 to Epstein disclose a method and apparatus for generating a random number using the meta-stable behavior of latches.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chat C. Do whose telephone number is (703) 305-5655.

The examiner can normally be reached on M => F from 7:00 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chaki Kakali can be reached on (703) 305-9662. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Chat C. Do
Examiner

Art Unit: 2124

Art Unit 2124

September 23, 2004

Kakali Chakraborty

KAKALI CHAKRABORTY
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100